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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 272004

Application Number: 09/374,989
Filing Date: 8/16/1999
Appellant(s): MATAMA

Marc S. Weiner
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/19/2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement that there are no known related appeals or interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Claim 4 is the only claim for appeal.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,837,433	Bohan et. al.	11-1998
6,094,218	Suzuki et al.	7-2000

5,753,426 Nair et al. 5-1998

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohan et al (5,837,433) in view of Suzuki et al (6,094,218).

Bohan et al disclose a color corrected display image that can be rapidly provided by color developing an imagewise exposed, silver halide color photographic material, scanning the developed image to form digital signals, and digitally manipulating those signals to correct either interimage interactions and/or gamma mismatches among at least two color recording units. The color negative material may contain an amount of masking coupler and Dmin adjusting dye of up to 0.2 mmol/ m^2. The limited amount reduces scanning noise and the Dmin adjusting dyes reduce the optical density which improves the scanning and digitization of the exposed material. Also, when the density sources are controlled in this manner, the silver halide emulsions may then be silver bromide and not predominantly silver chloride, but in order to shorten the processing time, it is preferred that the emulsions are silver chloride (column 10, lines 22-42). The material *may* contain a DIR coupler to aid in increasing the sharpness of the material although they may be obviated by employing the digital scanning and color correction steps taught by the reference (column 11, lines 17-26 and 49-65 and column 12, lines 1-55). The material is preferably encased in a spool cartridge (column 14, lines 4-17). Photographic processing of the material may be carried out using a conventional method for processing a film in a cartridge, or alternatively, can be processed by applying viscous solutions directly to the film surface. The residual error in the responses that are photographically processed by conventional

means may be corrected by transforming the photographic color negative image to density representative digital signals and applying correction values to those signals. The material is scanned and the digital records may be manipulated to produce a color corrected digital record which may then be forwarded to an output device such as a silver halide film (column 20, line 39 to column 21, line38). The resultant material has a good sharpness. The reference provides teachings for a silver halide photographic material having a color correction function due to a masking coupler *and /or* a DIR coupler, and interimage effects and for an alternative method of processing such a material which includes a step of digital manipulation to produce a color corrected image. Bohan et al fail to teach a material having a bar code in it or on the cartridge encasing it.

Suzuki et al disclose film cartridge having a bar code. The bar code may display film information such as the type or variety of the film (i.e. color film, positive film, or negative film), the frame number, and/ or the total number of frames. It may also display any information relating to photography such as time/date information and designated print size (column 6, lines 1-36). It is the position of the examiner that one of ordinary skill in the art would recognize that within the generic "color film", "positive film" and "negative film" are many types of materials which are different depending on the photographic additives in the film. One of ordinary skill in the art would have been motivated to record detailed "type or variety of film" information in the bar code of Suzuki et al so that the information is available via an image reading device.

Given the teaching of the Suzuki et al reference that a bar code providing information related to photography may be contained on the film spool cartridge and the teaching of the

Bohan et al reference that the color negative film may be encased in a cartridge, it would have been obvious to one of ordinary skill in the art the to encase the photosensitive material of Bohan et al which has a color correction function in a cartridge containing a bar code such as that described by Suzuki et al. in which the film information contained by the bar code is film variety or type information useful during digital processing for that specific material.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohan et al in view of Nair et al (5,753,426).

Bohan et al has been discussed above, but further teaches that the silver halide material of the invention may contain any conventionally employed layers such as filter layers, interlayers, subbing layers, and overcoats (column 7, lines 4-21).

Nair et al disclose a silver halide photographic material containing a transparent magnetic recording layer, which is capable of having coded information written and read therefrom. The information that is typically coded into the layer includes manufacturing data with regards to the various layers that are employed during the preparation of the film, information with regards to the properties of the various layers built into the substrate, and post-consumer information such as development related information, which is "helpful" to those in the developing laboratory (column 5, lines 2-23). Such information is useful in allowing a feedback loop to exposing devices and/or processors that could compensate for differences in sensiometry from batch to batch or to compensate for changes as a function of film aging. These corrections would reduce the variability from day to day that might otherwise occur and result in more consistent results i.e. better image quality (column 1, lines 44-53).

Given the teaching of the Nair et al reference that at transparent magnetic layer coded with information related to photography may be included in a silver halide film, and the teaching of the Bohan et al reference that the color negative film may be encased in a cartridge, it would have been obvious to one of ordinary skill in the art the to encase the photosensitive material of Bohan et al which has a color correction function choosing to include the transparent magnetic recording layer of Nair et al in which the film information contained by the bar code is processing instructions for that specific material to improve the quality of the images formed, with reasonable expectation of achieving images having good color reproduction.

(11) Response to Argument

To clarify the instantly claimed and appealed invention, Appellant is simply claiming a photographic material that has a color- correcting function or a sharpness enhancing function which is digitally processed, wherein present either on the film-containing cartridge or in a magnetic recording layer of the photographic material, is an identification code (i.e. barcode) that contains information describing the material as having the color-correcting or sharpness enhancing function to a reader of that code. The use of barcodes either on the film containing cartridges or in a magnetic recording layer of a material has been a conventional practice for years. Films such as KODAK ADVANTIX (an APS film) employs a magnetic recording layer, and on the KODAK website it is explained that "the ADVANTIX cameras magnetically record information about lighting conditions and exposure on the film. With this scene information, the processing lab can make color correction and exposure adjustments to provide you with the results superior to traditional 35 mm cameras." Additionally, U.S. Patents such as Zagenfeind et al. (4,888,613 12-1989; AGFA-Gevaert) and Kataoka et al. (5,083,155 1-1992; Fuji Photo Film

Co.) disclose the use of barcodes on film cartridges, and teach that the same type of information recorded on the magnetic layer as discussed above is recorded onto the barcodes on the film cartridges.

Appellant has argued that the combination of Bohan et al. and Suzuki et al. fails to teach or suggest prohibiting the use of a colored masking coupler and a DIR coupler at the same time. The Bohan et al. reference teaches that the color negative material may contain an amount of masking coupler and Dmin adjusting dye of up to 0.2 mmol/ m^2, and that the material *may* contain a DIR coupler to aid in increasing the sharpness of the material although they may be obviated by employing the digital scanning and color correction steps taught by the reference (column 11, lines 17-26 and 49-65 and column 12, lines 1-55). While the reference does allow for the possibility of the masking coupler and the DIR coupler to be employed simultaneously, the first three examples of the reference demonstrate a material that only contains the DIR coupler. Masking couplers C 2, C3, and C6, are not present in those exemplified materials. Thus, the reference *clearly* contemplates employing either the masking coupler OR the DIR coupler, and not solely both simultaneously. Additionally the examiner points to column 11, lines 16-26 of Bohan where the reference states that "due to the inability of the art to provide adequate chemical based color corrections whether by masking compounds OR Development Inhibitor Releasing (DIR) compounds, such constraints are obviated by the digital scanning and color corrections steps employed in specific embodiments of this invention." This is another instance where the reference teaches to use one or the other and not only both as argued by the Appellant. Even the Appellant on page 11, line16 admits that the Bohan et al reference *may* contain a DIR coupler, but is not required to do so.

With respect to the Appellant's argument that the reference does not "teach" the features claimed by the instant application, the examiner admits that her choice of wording (using "believed") was poor, but that does not change that the fact that the material of Bohan et al. includes a unique processing step, and that a cartridge containing the film, which has a bar code containing film information such as the type of variety of the film (i.e. color film, positive film, or negative film, the frame number, and/or the total number of frames), time/date information, and/or designated print size, would include information about this type of film and its unique processing information in order for the material to be processed correctly. Secondly, it is the examiner's position that since the bar code of Suzuki et al may contain information relating to photography with respect to the type of film contained in the cartridge, it would have been obvious to one of ordinary skill in the art to encode useful information relating to all photographic layers and the additives therein.

As pointed out by the examiner above, the practice of including such information is conventional, and it is the position of the examiner that film type information would most certainly include information about the type of film including processing information. In fact, the purpose of the barcode is to direct one processing the film to handle and treat the film in the appropriate manner, especially when the processing method employs a method unique to that type of film. If it did not, then how would a person processing the film know what steps to employ to insure that an acceptable print is achieved? Simply speaking, if a material (such as that of the Bohan et al. reference) is prepared, exposed, then the developed image scanned to form digital signals, and digitally manipulated to correct either interimage interactions and / or gamma mismatches, then the barcode on the film cartridge would possess this information so that these

steps are followed and a excellently colored finished product is obtained. Thus, the rejection is not based upon a belief as argued by Appellant, but a practice well known in the art.

Appellant has also argued that the combination of Bohan et al. and Suzuki et al. does not teach or suggest a photosensitive material dedicated to digital processing. Appellant appears to be arguing that photographic processing followed by digital processing fails to meet the limitations of the instant claim, which is unconvincing given that even in the abstract of the reference the processing steps are listed as "a color corrected display image can be rapidly provided by color developing an imagewise exposed, silver halide color photographic material, scanning the developed image to form digital signals, and digitally manipulating those signals to correct either interimage interactions and/or gamma mismatches among at least two color recording units." Thus, the processing method of Bohan employs two parts; one is the development processing step, then that is followed by the digital processing step. Both are employed by the Bohan et al reference to achieve the desired finished product, therefore the reference material is *dedicated* for digital processing. In fact, the reference even employs both steps while processing the examples of the reference (columns 44-52), and claims steps of scanning a photographically processed element to provide a digitized image. Appellant is relying on the reference's citation of a single patent (Pagano et al.) that only describes development processing to form an image then stops there with that image as its final product. However, that reference is cited for its teaching of a conventional development processing step for a film in a cartridge, but that is NOT a teaching of the reference that ONLY development processing is performed and not the digital steps which are *explicitly claimed*, but simply a reference for one to go to for conventional development processing methods. The ENTIRE disclosure of the Bohan et

al. reference teaches and even requires that processing is not complete until a final product that has been through development processing AND digital processing is obtained. Thus, the teachings of the Pagano et al. reference besides the particulars of the development processing step/ method are irrelevant. The reference cites Pagano only for information about that particular step and not for the entire processing method. Therefore it is the examiner's position that the Bohan et al. reference teaches and claims a material and method ***dedicated*** to a digital processing to achieve a finished product.

Appellant has also argued that the combination of the Bohan et al. reference and the Nair et al. reference fails to teach or suggest prohibiting the use of both a masking coupler and a DIR coupler at the same time. This argument is identical to that above, regarding the combination of the Bohan et al. and Suzuki et al. references. Again, in short, as to not repeat the entire rebuttal above, while the Bohan et al. reference does allow for the possibility of the masking coupler and the DIR couple to be employed simultaneously, the first three examples of the reference demonstrate a material that only contains the DIR coupler. Masking couplers C 2, C3, and C6, are not present in those exemplified materials. Thus, the reference *clearly* contemplates employing either the masking coupler OR the DIR coupler, and not solely both simultaneously.

Appellant has also argued that the combination of Bohan et al. and Nair et al. does not teach or suggest a photosensitive material dedicated to digital processing. This argument is identical to that above, regarding the combination of the Bohan et al. and Suzuki et al. references. Again, in short, as to not repeat the entire rebuttal above, Appellant appears to arguing that photographic processing followed by digital processing fails to meet the limitations of the instant claim, which is unconvincing given that even in the abstract of the reference the

processing steps are listed as "a color corrected display image can be rapidly provided by color developing an imagewise exposed, silver halide color photographic material, scanning the developed image to form digital signals, and digitally manipulating those signals to correct either interimage interactions and/or gamma mismatches among at least two color recording units." Thus, the processing method of Bohan employs two parts; one is the development processing step, then that is followed by the digital processing step. Both are employed by the Bohan et al reference to achieve the desired finished product, therefore the reference material is *dedicated* for digital processing.

Additionally, the examiner points out that Bohan et al. teaches that the silver halide material of the invention may contain any conventionally employed layers such as filter layers, interlayers, subbing layers, and overcoats (column 7, lines 4-21), and claims a conventional type of subbing layer, a magnetic recording layer, in claim 18.

As, the examiner has presented a clear and reasonable position based on the teachings of the three references, and demonstrated that the references obviate the presently claimed invention, the examiner maintains her position despite the Appellant's arguments.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Examiner
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February 18, 2004

Conferees
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February 7, 2004

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